

**United States Environmental Protection Agency  
Region 5**

<b>IN THE MATTER OF:</b>	)	
	)	
3M Company	)	<b>FINDING OF VIOLATION</b>
St. Paul, Minnesota	)	
	)	<b>EPA-5-02-MN-08</b>
	)	
Proceedings Pursuant to	)	
the Clean Air Act,	)	
42 U.S.C. §§ 7401 <u>et seq.</u>	)	

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**FINDING OF VIOLATION**

The Administrator of the U.S. EPA, by authority duly delegated to the undersigned, hereby notifies you and the State of Minnesota that 3M is in violation of the Stratospheric Ozone Standards as set forth in this Finding of Violation. The United States Environmental Protection Agency finds that 3M Tape Manufacturing Division Plant, St. Paul (3M), has violated Section 608 of the Clean Air Act (Act), 42 U.S.C. § 7471g. Specifically, 3M has violated the Protection of Stratospheric Ozone Standards at 40 C.F.R. Part 82, Subpart F, Recycling and Emissions Reduction, as follows:

**Regulatory Authority**

1. The Stratospheric Ozone Standards, Subpart F, apply to any person servicing, maintaining, repairing, or owning appliances, as those terms are defined at 40 C.F.R. § 82.152.
2. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.152, define "industrial process refrigeration" as complex customized appliances used in the chemical ... industries. These appliances are directly linked to the industrial process.
3. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.156(i)(2), require that an owner or operator of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant must have leaks repaired if the appliance is leaking at a rate such that the loss of refrigerant will exceed 35 percent of the total charge during a 12-month period. Repairs must bring

annual leak rates to below 35 percent during a twelve month period.

4. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.156(i)(9), require that an owner or operator of industrial process refrigeration equipment must repair leaks pursuant to 40 C.F.R. § 82.156(i)(2) within 30 days after discovery of the leak.
5. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.156(i)(3), require that an owner or operator of industrial process refrigeration equipment conduct a follow-up verification test within 30 days after the initial verification test.
6. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.156(i)(6), state that a one-year retrofit and retirement plan must be developed within 30 days of a failed follow-up verification test. The plan must be kept at the site of the appliance.
7. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.156(i)(3)(ii), require that an owner or operator must retrofit or replace industrial process refrigeration equipment within one year of a failed follow-up verification test.
8. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.156(i)(3)(iii), require that an owner or operator of industrial process refrigeration equipment that fails a follow-up verification test must notify U.S. EPA within 30 days of the failed follow-up verification test.

#### **Finding of Facts**

9. 3M owns and operates a tape manufacturing plant at 751 Mendota Avenue, St. Paul, Minnesota (the Facility). This plant contains an industrial process refrigeration unit with a normal charge of over 50 pounds.
10. The industrial process refrigeration unit, ACM022-03, uses the class I refrigerant R-502.
11. The industrial process refrigeration unit ACM022-03 at 3M, experienced leaks during the time between November 16, 1999 and June 30, 2000 that resulted in an annual leak rate exceeding 35 percent.

12. Repairs performed by 3M on the following dates did not result in the annual leak rate of an industrial process refrigeration unit ACM022-03 being returned to below 35 percent:
  - A. July 12, 1999
  - B. November 6, 1999
  - C. December 10, 1999
13. 3M failed to perform follow-up verification tests by the following dates to verify that the repairs performed in conjunction with the initial verification tests had brought the leak rate of the industrial process refrigeration unit ACM022-03 to below 35 percent:
  - A. August 11, 1999
  - B. December 06, 1999
  - C. January 9, 2000
14. 3M did not develop retrofit or retirement plans for the industrial process refrigeration unit ACM022-03 when repairs performed on the following days were unable to bring the leak rate to below 35 percent:
  - A. July 12, 1999
  - B. November 6, 1999
  - C. December 10, 1999
15. 3M did not retrofit or retire the industrial process refrigeration unit ACM022-03 when repairs performed on the following days were unable to bring the leak rate to below 35 percent:
  - A. July 12, 1999
  - A. November 6, 1999
  - B. December 10, 1999
16. 3M did not notify the U.S. EPA after repairs on the industrial process refrigeration unit ACM022-03 on the following days failed to bring the leak rates to below 35 percent:
  1. July 12, 1999
  2. November 6, 1999
  3. December 10, 1999

**Violations**

17. As owner of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant, 40 C.F.R. § 82.156(i)(2) requires 3M to have leaks repaired if the appliance is leaking at a rate such that the loss of refrigerant will exceed 35 percent of the total charge during a 12-month period. Repairs must bring annual leak rates to below 35 percent during a twelve month period. 3M is in violation of 40 C.F.R. § 82.156(i)(2) and Section 608 of the Act, 42 U.S.C. § 7471g, for failing to repair leaking appliances such that the annual leak rate is brought below 35 percent.
18. As owner of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant, 40 C.F.R. § 82.156(i)(3) requires 3M to perform a follow-up verification test to ensure that repairs have been successful. 3M is in violation of 40 C.F.R. § 82.156(i)(3) and Section 608 of the Act, 42 U.S.C. § 7471g, for failing to properly conduct follow-up verification tests.
19. As owner of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant, 40 C.F.R. § 82.156(i)(6) requires 3M to develop a one-year retrofit and retirement plan for leaking refrigeration units within thirty days of a failed follow-up verification test. 3M is in violation of 40 C.F.R. § 82.156(i)(6) and Section 608 of the Act, 42 U.S.C. § 7471g, for failing to develop a one-year retrofit and retirement plan for leaking refrigeration equipment following a failed follow-up verification test.
20. As owner of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant, 40 C.F.R. § 82.156(i)(3)(ii) requires 3M to retrofit or retire a leaking refrigeration unit within one year of a failed follow-up verification test. 3M is in violation of 40 C.F.R. § 82.156(i)(3)(ii) and Section 608 of the Act, 42 U.S.C. § 7471g, for failing to retrofit or retire leaking refrigeration equipment following a failed follow-up verification test.
21. As owner of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant, 40 C.F.R. § 82.156(i)(3)(iii) requires 3M to notify the U.S. EPA within 30 days of a failed follow-up verification

test. 3M is in violation of 40 C.F.R. § 82.156(i)(3)(iii) and Section 608 of the Act, 42 U.S.C. § 7471g, for failing to notify the U.S. EPA of failed follow-up verification tests.

2/19/02  
Date

Stephen Rothblatt *S.R.*  
Stephen Rothblatt, Acting Director  
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-02-MN-08, by Certified Mail, Return Receipt Requested, to:

Belinda Wirth  
Senior Environmental Engineer  
Building 42-2E-27, 3M Main Plant  
P.O. Box 33331  
St. Paul, Minnesota 55133-3331

I also certify that I sent a copy of the Finding of Violation by first class mail to:

Ann Foss, Enforcement  
Minnesota Pollution Control Agency  
520 LaFayette Rd. North  
St. Paul, Minnesota 55155

on the 22<sup>nd</sup> day of July, 2002.

Loretta Shaffer for

Loretta Shaffer, Secretary  
AECAS, MN/OH

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0006 0201 6729